

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) An integrated item batching and information handling system for producing batches of items, said system comprising:
  - a process flow line with item batching means arranged between an item intake and at least one batch receptacle,
  - a computer,
  - first sensing means capable of transmitting electronic signal to said computer for establishing a first set of data representing characteristics of items entering the intake, and
  - second sensing means capable of transmitting electronic signal to said computer for establishing data representing characteristics of batches from at least one batch receptacle,

wherein said computer receives said first set of data from said first sensing means and is adapted to generate a second set of data representing the characteristic of expected items entering the intake, and is further adapted to generate a third set of data representing the characteristics of expected batches from said expected items, and receives a fourth set of data from the second sensing means representing the characteristics of the actual batches, characterized in that the computer is adapted to generate a fifth set of data representing characteristics of a set of imaginary items, and corresponding conditions of batches expected from a theoretically ideal batching of said fifth set of data, furthermore, based on said sets of data, said information handling

system presents the result for batches an demand and recommends the optimal one to the operator or controls the batching system automatically.

2. (Original) A system according to claim 1, wherein the computer comprises one central processing unit receiving data from the first and the second sensing means.

3. (Currently Amended) A system according to ~~any of the preceding claims~~claim 1, wherein the computer comprises additional processing units connected between at least one of the sensing means and the central processing unit.

4. (Currently Amended) A system according to ~~any of the preceding claims~~claim 1, further comprising a data storage means and data entering means allowing entering of data sets into the data storage means.

5. (Currently Amended) A system according to ~~any of the preceding claims~~claim 1, comprising a conveyer for conveying the items from the intake passed the first sensor and the batching means to the at least one batch receptacle.

6. (Original) A system according to claim 5, wherein the computer is adapted to generate and compare data sets during the conveying of items.

7. (Currently Amended) A system according to ~~any of the preceding claims~~claim 1, wherein at least one of the first and second sensing means comprises a scale for

determining data representative of a weight of an item or batch receptacle.

8. (Currently Amended) A system according to ~~any of the preceding claims~~claim 1, wherein the computer is adapted generate a correlation between two of the first, second, third and fourth sets of data.

9. (Currently Amended) A system according to ~~any of the preceding claims~~claim 1, wherein the computer is adapted to visualize at least one of the first, the second, the third and the fourth sets of data graphically on a screen.

10. (Currently Amended) A system according to ~~any of the preceding claims~~claim 1, wherein the computer is adapted to visualize a correlation between two or more of the first, second, third and fourth sets of data.

11. (Currently Amended) A system according to ~~claims~~claim 9, wherein the computer is adapted to visualize more than one data set or more than one correlation In a single screen image.

12. (Currently Amended) A system according to ~~any of the preceding claims~~claim 1, wherein at least one of the second and the third sets of data represent one of:

an average weight of the first set of items, and

a standard deviation of the first set of items,

and one of:

a corresponding average overweight expected for batches of the first set of items,  
and

a number of batches expected to have an underweight.

13. (Currently Amended) A system according to ~~any of the preceding claims~~claim 1,

wherein at least one of the first and fourth sets of data represents one of:

an average weight of the first set of items, and

a standard deviation of the first set of items.

14. (Currently Amended) A system according to ~~any of the preceding claims~~claim 1,

wherein the computer system comprises data input means allowing a user to enter data into at least one of the second, third and fourth sets of data.

15. (Currently Amended) A system according to ~~any of the preceding claims~~claim 1,

wherein the computer system is adapted to recalculate expected conditions of batches based on the second and third sets of data based on a user request.

16. (Original) A method of analyzing process data in a batching process of an integrated item batching and information handling system of the kind comprising a process flow line with item batching means arranged between an item intake and at least one batch receptacle, first sensing means for establishing data representing characteristics of items entering the intake, and second sensing means for establishing data representing the characteristics of the batches, said method comprising the steps

of

- conveying items between an item intake and at least one batch receptacle in an item processing line,
- establishing first set of data representing characteristics of Items entering the intake, and
- generating a second set of data representing characteristics or expected items entering the intake, and
- generate a third set of data, representing the characteristics of expected batches from said expected items, and
- receiving data from said second sensor, and establish a fourth set of data, representing the actual conditions of batches, and
- generate a fifth set of data of imaginary items,
- calculate theoretically ideal batches,
- wherein said theoretically ideal batches are calculated from said imaginary items contained in said fifth set of data.

17. (Original) A method according to claim 16, further comprising generating a correlation between two of the second, third, fourth and fifth sets of data.

18. (Currently Amended) A method according to ~~any of claims~~claim 16-17, further comprising visualising at least one of the second, the third, the fourth and the fifth sets of data graphically on a screen.

19. (Currently Amended) A method according to ~~any of claims~~claim 16-18, further comprising visualising a correlation between two or more of the second, third, fourth and fifth sets of data.
20. (Currently Amended) A method according to ~~claims~~claim 17-18, wherein more than one data set or more than one correlation is visualized in a single screen image.
21. (Currently Amended) A method according to ~~any of claims~~claim 17-20, wherein the data represents weights of the items and batches.